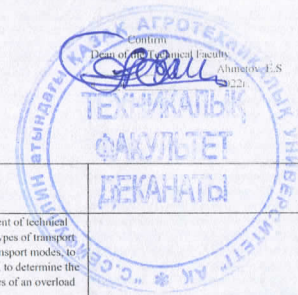


CATALOG OF ELECTIVE DISCIPLINES
For students in the direction of preparation 6B113 Transport services
Brief description of the elective disciplines of the educational program



EPG	EP	Form of education	The name of discipline	Code of subject	Discipline cycle	Component	Number of	Level of training	Faculty	Courses	Academic period	Pre-requisites	Post-requisites	Brief content of the discipline	Key learning outcomes	Name of the alternative discipline
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	The interaction of transport	VVT 2211	BS	Elective subjects	5.0	Bachelor	Technical service	2	3	Safety of transport vehicles	Organization of transportations and traffic control	Forms of interaction between different modes of transport; laws of development of technical means and operation of different types of transport; peculiarities of different types of transport into a unified transport system; technical and operational characteristics of transport modes, to choose the technical means for the interaction of different modes of transport, to determine the structure and capacity of transport nodes; to identify the technological schemes of an overload of the main cargoes at the points of splicing, transport		Device Basics of vehicles - I
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Device Basics of vehicles - I		BS	Elective subjects	5.0	Bachelor	Technical service	2	3			Basics of the engine, the duty cycle. Crank mechanism. Classification. Components and their purpose. Gas distribution mechanism. Timing phase. Cooling system. Features of devices of cooling systems. Lubrication system. Supply system. Features of diesel and gasoline power systems. Ignition system. Electrics. Current source. Current consumers. Auxiliary equipment. Starting system.		The interaction of transport
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Interchangeability of standardization and technical measurements	VST1 3202	BS	Elective subjects	5.0	Bachelor	Стандартизация метрологии и сертификация	3	1	Digitalization in engineering	Modeling of engineering systems	The studying of modern worldview concepts and principles in the field of interchangeability, standardization and technical measurements. The acquisition of deep knowledge and solid skills for their application in practice. Familiarization of students with the basics of standardization and interchangeability and development of students' skills in solution to a questions of practical use of reference technical literature in the production, repair and operation of equipment.	Develop technical drawings with the requirements of the EESCD, possess the skills of modern computer-aided design, apply in practice the compliance of the developed projects and technical documentation, and other regulatory documents on the design and calculation of design development.	Device Basics of vehicles - II
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Device Basics of vehicles - II		BS	Elective subjects	5.0	Bachelor	Technical service	3	1			Transmission. The classification of total device. The principle of operation of the components. Clutch. Variable transmission. Transfer case. Boxes machines. Driveline. Back axle. Main gear. Differential. Carrier system. Views. Design features. Suspension. Chassis. Steering Brake system. Classification. Component. Principle of operation.		Interchangeability of standardization and technical measurements
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Technology and mechanization of cargo handling works	TMPRR 3217	BS	Elective subjects	5.0	Bachelor	Technical service	3	1	The interaction of transport	Organization of transportations and traffic control	Highly efficient production of loading and unloading warehouse operations based on the use of modern systems of machines, technical and economic task for the design and creation of new loading and unloading machines; to organize the commissioning, maintenance and repair of modern means of mechanization and automation both in a centralized manner and by local means	The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation) Critical understanding of classification, indexing and arrangement of vehicles; Able to organize the movement of transport, management, warehousing of goods; Apply advanced technologies of cargo delivery, delivery of goods on special conditions, to know the factors and levels of logistics development, basic concepts of logistics; It is able to create the digital industry of the future-ensuring long-term sustainability, launching the digital transformation of the country by increasing the level of human capital development, building institutions for innovative development and, in General, the progressive development of the digital ecosystem. The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to prevent and resolve conflict in interactions with other logistics centres, to know the international transport classification of goods and the classification used in the transport sector; to Know the basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability. Able to organize forms of interaction between different modes of transport; to Know General principles of control over the operational work of transport, based on the use of advanced equipment and technology. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to Know the basic principles of forwarding activity; to Apply the highly efficient production of loading and unloading work, warehouse operations through the use of modern systems of cars; the Development of urban transport system and street network of the city.	Fluid and gas mechanics, hydro and pneumatic actuator
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Fluid and gas mechanics, hydro and pneumatic actuator		BS	Elective subjects	5.0	Bachelor	Technical service	3	1			Methods of calculating the parameters of hydraulic machines, control and control elements, characteristics of hydraulic and pneumatic drives; calculate the characteristics of hydraulic machines, hydraulic drive; calculate the characteristics of the control and regulation of the hydraulic drive, read and make schemes of hydraulic and pneumatic drives; the main methods of calculation of hydraulic machines and controls and regulation of hydraulic drives	Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to prevent conflict situations in interaction with enterprises, mass media and act as a mediator in conflict resolution	Technology and mechanization of cargo handling works

B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Basics of Transportation Loads	Gru 3209	BS	Elective subjects	5.0	Bachelor	Technical service	3	1	The interaction of transport	Organization of transportations and traffic control	International transport classification of goods and the classification applied on motor transport; selection of means of protection and marking signs, norms of natural loss of various types of goods; registration of documentation on transportation of goods; calculation of number of cargo units in transport container according to standard standard sizes; to count number of containers and pallets for transportation of the set volume of	The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation) Critical understanding of classification, indexing and arrangement of vehicles; Able to organize the movement of transport, management, warehousing of goods; Apply advanced technologies of cargo delivery, delivery of goods on special conditions, to know the factors and levels of logistics development, basic concepts of logistics; It is able to create the digital industry of the future-ensuring long-term sustainability, launching the digital transformation of the country by increasing the level of human capital development, building institutions for innovative development and, in General, the progressive development of the digital ecosystem. The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to prevent and resolve conflict in interactions with other logistics centres; to know the international transport classification of goods and the classification used in the transport sector; to Know the basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; Able to organize forms of interaction between different modes of transport; to Know General principles of control over the operational work of transport, based on the use of advanced equipment and technology. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to Know the basic principles of forwarding activity; to Apply the highly efficient production of loading and unloading work, warehouse operations through the use of modern systems of cars; the Development of urban transport system and street network of the city.	Bases on designing of the car
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Bases on designing of the car		BS	Elective subjects	5.0	Bachelor	Technical service	3	1			The principles of a systematic approach to the design and construction of car products as the basis for their reliable operation; use the design documentation as a source of expression of technical thought; use applied knowledge in the field of the relationship of technical and economic decisions taken at the stage of product development	The ability to determine the algorithm for solving the transport problem, take into account factors in the construction of the structure of their relationships and identify priority areas Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Ability to prevent conflict situations in interaction with enterprises, mass media and act as a mediator in conflict resolution Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology	Basics of Transportation Loads
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Economics of firm and entrepreneurship	EPP 3204	BS	Elective subjects	4.0	Bachelor	Economy	3	2	Basics of economics and law	Transport logistics	The concept of an enterprise as a subject and object of business activity; The products of the enterprise, its competitiveness; Production resources of the enterprise; Enterprise - an economic entity of the market; Joint stock companies; Small business; Taxation of small business; Organization and registration of a business firm; Competition in the business system; Commercial activities of the company; Business infrastructure; Marketing in the business system; Management in the activities of the enterprise; Management Motivation	Possess knowledge of socio-humanitarian and economic disciplines, willingness to demonstrate a well-formed worldview, civic and moral position of a highly educated person with a broad outlook and a culture of thinking. Demonstrate knowledge of natural science disciplines. The ability to explain, formulate and use basic indicators for solving tasks, communication with other sciences and its practical significance	The engine management system
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	The engine management system		BS	Elective subjects	4.0	Bachelor	Technical service	3	2			Influence of input signals of sensors (primary measuring transducers) on the operation of the internal combustion engine; navigate and determine the elements of ESA in the engine compartment of cars with ESA internal combustion engines; use diagnostic equipment of various levels to determine the faults of ESA internal combustion engines	The ability to determine the algorithm for solving the transport problem, take into account factors in the construction of the structure of their relationships and identify priority areas Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology Possession of skills of the address with modern equipment, ability to use information technologies in the sphere of professional activity	Economics of firm and entrepreneurship
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Organization of transportations and traffic control	OPUD 3213	BS	Elective subjects	5.0	Bachelor	Technical service	3	2	Basics of Transportation Loads	Transport logistics	The general principles of transport operations management, based on the use of advanced technology and technology; operation of individual transport facilities with regard to the use of an automated control system; theoretical bases on optimization of production processes, and, consequently, of the whole complex included in the technology of their work, taking into account economic efficiency in the implementation of planned tasks		Transport systems and transportation process
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Transport systems and transportation process		BS	Elective subjects	5.0	Bachelor	Technical service	3	2			Features of technological influences on the vehicle and PP of various types; organizational structure and management structure of transport enterprises; to analyze and develop recommendations to improve the efficiency of the transport enterprise; to classify transport and transport-technological machines for various purposes, systems and elements of regulatory documentation	Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Ability to prevent conflict situations in interaction with enterprises, mass media and act as a mediator in conflict resolution Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology	Organization of transportations and traffic control
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Organization of cargo transportation	OGP 3215	BS	Elective subjects	5.0	Bachelor	Technical service	3	2	Basics of Transportation Loads	Transport logistics	Normative legal acts defining the order of transportation of goods by transport; conclusion of the contract for transportation of goods, provision of vehicles; acceptance of cargo for transportation, loading of goods into vehicles and unloading of goods from them; terms of delivery of cargo, delivery of cargo, storage of cargo in the terminal of the carrier, cleaning of vehicles, containers, features of transportation of certain types of goods	The ability to determine the legal framework and legislation, trends in economic development of the Republic, has deep knowledge in the field of national policy and social priorities, socio-political concepts and structures, historical and socio-political situation in the world; to Use General concepts and basic formulas of mathematics in solving problems; to assess the adequacy of the choice of mathematical models to solve problems; to Apply theoretical knowledge to solve specific physical problems and situations, to analyze the results of physical experiment. The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to prevent and resolve conflict in interactions with other logistics centres; to know the international transport classification of goods and the classification used in the transport sector; to Know the basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; Able to organize forms of interaction between different modes of transport; to Know General principles of control over the operational work of transport, based on the use of advanced equipment and technology. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to Know the basic principles of forwarding activity; to Apply the highly efficient production of loading and unloading work, warehouse operations through the use of modern systems of cars; the Development of urban transport system and street network of the city.	Transport systems and transportation process

B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Transport systems and transportation process		BS	Elective subjects	5.0	Bachelor	Technical service	3	2			Features of technological influences on the vehicle and PP of various types; organizational structure and management structure of transport enterprises; to analyze and develop recommendations to improve the efficiency of the transport enterprise; to classify transport and transport-technical machines for various purposes, systems and elements of regulatory documentation	Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Ability to prevent conflict situations in interaction with enterprises, mass media and act as a mediator in conflict resolution Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology	Organization of cargo transportation
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Providing transport safety	OBDT 3219	BS	Elective subjects	5.0	Bachelor	Technical service	3	2	Vehicles	Organization of passenger transportation	To use an integrated approach to ensuring traffic safety in transport in the conditions of commercialization of transport services; to apply methods, engineering and technical means of transport security system; to identify potential threats and actions affecting the security of transport infrastructure and vehicles; to use in professional activities the legislation and technical standards in the field of traffic safety	The ability of the organization of works on design of governance and security in various environments and works of group of performers. The ability of formation of project objectives, solution of transport problems, identifying priorities, taking account of indicators of economic and environmental security. Analysis of trade-offs taking into account different road safety requirements in different types of planning and determination of optimal solutions. Ability to ensure the proper maintenance of technical devices and structures in transport to ensure road safety.	Mechanics of materials
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Mechanics of materials		BS	Elective subjects	5.0	Bachelor	Technical mechanics	3	2			Mastering the basic concepts and definitions set out in the sections: theoretical mechanics, theory of mechanisms and machines, resistance of materials. Basic concepts, laws and models of mechanics, kinematics and hydromechanics, classification of mechanisms, assemblies and parts, performance criteria and factors affecting them. Dynamics of energy conversion into mechanical work, analysis of the functionality of mechanisms and their applications.	The ability to determine the algorithm for solving the transport problem, take into account factors in the construction of the structure of their relationships and identify priority areas Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters	Providing transport safety
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Transportation and forwarding services in transport	TEOT 3220	BS	Elective subjects	5.0	Bachelor	Technical service	3	3	Organization of cargo transportation	Licensing and certification of transport vehicles and services	The main provisions of transport and forwarding activities; use the legal framework of transport and forwarding activities; calculation and analysis of quality indicators of freight and passenger traffic, based on the organization and technology of transportation, safety requirements of the transportation process	The ability to determine the legal framework and legislation, trends in economic development of the Republic, has deep knowledge in the field of national policy and social priorities, socio-political concepts and structures, historical and socio-political situation in the world; to Use General concepts and basic formulas of mathematics in solving problems; to assess the adequacy of the choice of mathematical models to solve problems; to Apply theoretical knowledge to solve specific physical problems and situations; to analyze the results of physical experiment. The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). Critical understanding of classification, indexing and arrangement of vehicles. Able to organize the movement of transport, management, warehousing of goods. Apply advanced technologies of cargo delivery, delivery of goods on special conditions; to know the factors and levels of logistics development. Basic concepts of logistics; It is able to create the digital industry of the future-ensuring long-term sustainability, launching the digital transformation of the country by increasing the level of human capital development, building institutions for innovative development and, in General, the progressive development of the digital ecosystem. The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to Know the basic principles of forwarding activity; to Apply the highly efficient production of loading and unloading work, warehouse operations through the use of modern systems of cars; the Development of urban transport system and street network of the city.	Basics of organization of wheeled and caterpillar machines
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Basics of organization of wheeled and caterpillar machines		BS	Elective subjects	5.0	Bachelor	Mechanization of technological processes	3	3			General information about the design, arrangement and operation of units and systems of basic models, basic adjustments, techniques for maintaining technical condition, expanding practical skills and abilities in the field of technical operation of domestic and foreign tractors and agricultural vehicles widely used in farms.	To organize highly efficient operation of machines, apparatus, machinery and technological equipment in production, to show leadership qualities	Transportation and forwarding services in transport
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Organization of cargo and commercial work	OGKR 4304	AS	Elective subjects	5.0	Bachelor	Technical service	4	1	Transport logistics	Organization of traffic motion	Organization of cargo and commercial work on the basis of advanced technology; automated control systems and integrated mechanization and automation of loading and unloading. Freight and commercial work on railway transport. Cargo and commercial work on road transport. Cargo and commercial work on air transport. Cargo and commercial work on water transport	The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to prevent and resolve conflict in interactions with other logistics centres; to know the international transport classification of goods and the classification used in the transport sector; to Know the basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; Able to organize forms of interaction between different modes of transport; to Know General principles of control over the operational work of transport, based on the use of advanced equipment and technology. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to Know the basic principles of forwarding activity; to Apply the highly efficient production of loading and unloading work, warehouse operations through the use of modern systems of cars; the Development of urban transport system and street network of the city. Ability to use corporate governance tools in order to increase the economic and investment attractiveness and capitalization of the company, methods and functions of process control; ability to model engineering systems, the creation of engineering systems for administrative, industrial, commercial and residential buildings, the use of special software for simulation of engineering systems; Capable to organize traffic and the conditions of carriage of goods, freight rates, shipping documents, maintaining and clearance of unsafe cargo transportations; to Know the main activities on the organization of passenger transportation, traffic and safety transportation, organization of ticket and cash operations, legislation and the technical regulations operating in the transport, including passenger transportation.	Technical exploitation of a transport technique
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Technical exploitation of a transport technique		AS	Elective subjects	5.0	Bachelor	Technical service	4	1			The method of determining the probability of failure of complex technical systems, the main fault TE systems and methods of their elimination; technology of technical inspection of TE and registration of normative documentation on the results of inspection; the ability to analyze the necessary information to improve the processes of maintenance and TR repair	The ability to determine the algorithm for solving the transport problem, take into account factors in the construction of the structure of their relationships and identify priority areas Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology	Organization of cargo and commercial work

6B05 - "Transportation Services"	6B1302 - "Traffic management and safety"	Full-time (bachelor 4 years) trimester	Labour safety	OT 4306	AS	Elective subjects	4.0	Bachelor	Mechanization of technological processes	4	1	Bases of economics and law	Fundamentals of patenting for transport	Occupational hazards at the workplace, production site, enterprise, taking into account the requirements of labor laws, rules and labor protection standards at the workplace, production site, enterprise using knowledge of technological production processes; The Labor Code of the Republic of Kazakhstan and other regulatory legal acts containing labor law provisions relating to the organization of labor (internal work regulations, leave regulations, travel regulations, etc.);	Designing of the enterprises on motor transport	
6B05 - "Transportation Services"	6B1302 - "Traffic management and safety"	Full-time (bachelor 4 years) trimester	Designing of the enterprises on motor transport	AS	AS	Elective subjects	4.0	Bachelor	Technical service	4	1	Providing transport safety	Transport planning city	Stages and methods of design and reconstruction of enterprises of road transport (AT), legislative and regulatory support, as well as optimization of production capacity of motor transport enterprises; to conduct research on the scientific and technical justification of innovative technologies of operation of transport complexes; to solve problems to ensure safe and effective operation of it, their units and technological equipment;	Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment. Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters. Analysis of innovation efficiency of transport enterprises, application of innovative technologies of transport equipment and technology. Possession of skills of the address with modern equipment, ability to use information technologies in the sphere of professional activity.	labour safety
6B05 - "Transportation Services"	6B1302 - "Traffic management and safety"	Full-time (bachelor 4 years) trimester	Organization of passenger transportation	OTP 4208	AS	Elective subjects	5.0	Bachelor	Technical service	4	1	Providing transport safety	Transport planning city	The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; a working ability of the design of the planned signs and high-rise frames for precise engineering-graphic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; to Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. Ability to use corporate governance tools in order to increase the economic and investment attractiveness and capitalization of the company, methods and means of determining the economic and investment attractiveness of the company, methods and means of determining the economic and investment attractiveness of buildings of special value or objects of engineering systems. Capable to organize traffic and the conditions of carriage of goods, freight rates, shipping documents, maintaining and clearance of unsafe cargo transportation; to know the main activities on the organization of passenger transportation, traffic and safety transportation; organization of ticket and cash operations, legislation and the technical regulations operating in the transport, including passenger transportation. Ability to work in a team, to be flexible and mobile in various situations, knowledge of rules and norms of labor protection in the workplace; Ability to transport logistics, modern transport and technological supply chains. Ability to master issues, engineering surveys, design, construction, operation, maintenance, monitoring and reconstruction of roads, buildings and structures; Know the Regulations on licensing of transportation, forwarding and other activities related to the implementation of the transport process, repair and maintenance of vehicles on road transport in the Republic of Kazakhstan. The position of Kazakhstan on transport inspection.	Designing of the enterprises on motor transport	
6B05 - "Transportation Services"	6B1302 - "Traffic management and safety"	Full-time (bachelor 4 years) trimester	Designing of the enterprises on motor transport		AS	Elective subjects	5.0	Bachelor	Technical service	4	1	Organization of transportations and traffic control	Internship	Systems of urban transport and road network of the city; development of measures to improve the transport and operational characteristics of the network; classification of city streets and roads; capacity of the street network of the city; design elements of the street and road network of the city; design urban freight roads; determine traffic patterns at the intersections of city streets	Ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; a working ability of the design of the planned signs and high-rise frames for precise engineering-graphic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). Critical understanding of classification, indexing and arrangement of vehicles; Able to organize the movement of transport management, warehousing of goods. Apply advanced technologies of cargo delivery, delivery of goods on special conditions, to know the factors and levels of logistics development, basic concepts of logistics. It is able to create the digital industry of the future-ensuring long-term sustainability, launching the digital transformation of the country by increasing the level of human capital development, building institutions for innovative development and, in general, the progressive development of the digital ecosystem. The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements of innovations and innovation activities of logistics centers; To know the legal regulations governing the efficiency of innovations in the field of interchangeability and technical measurements. The ability to analyze the earnings of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to know the basic principles of forwarding activity; to Apply the highly efficient production of loading and unloading work, warehouse operations through the use of modern systems of cars; the development of urban transport system and street network of the city.	Organization of passenger transportation
6B05 - "Transportation Services"	6B1302 - "Traffic management and safety"	Full-time (bachelor 4 years) trimester	Economics of firm and entrepreneurship	TPG 4208	BS	Elective subjects	4.0	Bachelor	Economy	4	2	Organization of transportations and traffic control	Internship	The concept of an enterprise as a subject and object of business activity; The products of the enterprise; its core competencies of the enterprise; classification of the enterprise; Enterprise as an economic entity of the legal, financial, commercial; Small business; Competition in the business system; Organization and registration of a business firm; Competition in the business system; Commercial activities of the economy; Business infrastructure; Marketing in the business system; Management in the activities of the enterprise; Management Motivation	Economics of firm and entrepreneurship	
6B05 - "Transportation Services"	6B1302 - "Traffic management and safety"	Full-time (bachelor 4 years) trimester	Economics of firm and entrepreneurship		BS	Elective subjects	4.0	Bachelor	Economy	4	2	Organization of transportations and traffic control	Internship	The concept of an enterprise as a subject and object of business activity; The products of the enterprise; its core competencies of the enterprise; classification of the enterprise; Enterprise as an economic entity of the legal, financial, commercial; Small business; Competition in the business system; Organization and registration of a business firm; Competition in the business system; Commercial activities of the economy; Business infrastructure; Marketing in the business system; Management in the activities of the enterprise; Management Motivation	Economics of firm and entrepreneurship	
6B05 - "Transportation Services"	6B1302 - "Traffic management and safety"	Full-time (bachelor 4 years) trimester	Fundamentals of patenting for transport	OPT 4206	BS	Elective subjects	3.0	Bachelor	Technical service	4	2	Descriptive geometry and engineering graphics	Internship	The bases of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; the formulation of goals and objectives of the research; the methodology of organizing and conducting research; principles of analysis, hypotheses, synthesis of existing information	Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment. Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects. Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters. Analysis of innovation efficiency of transport enterprises; application of innovative processes of transport equipment and technology. Possession of skills of the address with modern equipment, ability to use information technologies in the sphere of professional activity.	Economics of firm and entrepreneurship

B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Economics of firm and entrepreneurship		BS	Elective subjects	3.0	Bachelor	Economy	4	2			The concept of an enterprise as a subject and object of business activity; The products of the enterprise, its competitiveness; Production resources of the enterprise; Enterprise - an economic entity of the market; Joint stock companies; Small businesses; Taxation of small businesses; Organization and registration of a business firm; Competition in the business system; Commercial activities of the company; Business infrastructure; Marketing in the business system; Management in the activities of the enterprise; Management Motivation	Possess knowledge of socio-humanitarian and economic disciplines, willingness to demonstrate a well-formed worldview, civic and moral position of a highly educated person with a broad outlook and a culture of thinking. Demonstrate knowledge of natural science disciplines. The ability to explain, formulate and use basic indicators for solving tasks, communication with other sciences and its practical significance	Fundamentals of patenting for transport
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Organization of traffic motion	ODD 4221	BS	Elective subjects	5.0	Bachelor	Technical service	4	2	Licensing and certification of transport vehicles and services	Internship	Carry out UIDS surveys and identify shortcomings in the existing organization of road traffic; develop comprehensive engineering measures to improve conditions and ensure traffic safety in various road, transport and meteorological conditions; basic methodological principles of road traffic organization and ways to solve it in specific conditions	The ability of formation of project objectives, solution of transport problems, identifying priorities, taking account of indicators of economic and environmental security. Analysis of trade-offs taking into account different road safety requirements in different types of planning and determination of optimal solutions. Ability to ensure the proper maintenance of technical devices and structures in transport to ensure road safety. Ability to analyze and evaluate the efficiency of production and non-production costs for the development of transport and technological systems. Ability to develop plans for the development of transport enterprises and road safety management systems.	Bases of production technology and transport technique repair
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Bases of production technology and transport technique repair		BS	Elective subjects	5.0	Bachelor	Technical service	4	2			Regularities of formation of productivity and carrying capacity of means of service; organization of maintenance, rational technology of maintenance and complex indicators of maintenance and repair of transport equipment; to form students' scientific, reasonable approach to the organization and technology of work on maintenance and repair of transport equipment	Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology	Organization of traffic motion
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Modeling of engineering systems	MIS 4302	AS	Elective subjects	4.0	Bachelor	Technological machines and equipment	4	2	Information and communication technologies	Internship	Modern mathematical methods of calculation modeling of engineering systems of automatic control in relation to complex objects; innovative technologies and methods of calculation modeling of engineering systems of management of objects on the basis of modern scientific approaches; data on the development and design of complex and multifactorial problems modeling of engineering systems of technical and scientific objects		Economics of firm and entrepreneurship
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Economics of firm and entrepreneurship		AS	Elective subjects	4.0	Bachelor	Economy	4	2			The concept of an enterprise as a subject and object of business activity; The products of the enterprise, its competitiveness; Production resources of the enterprise; Enterprise - an economic entity of the market; Joint stock companies; Small businesses; Taxation of small businesses; Organization and registration of a business firm; Competition in the business system; Commercial activities of the company; Business infrastructure; Marketing in the business system; Management in the activities of the enterprise; Management Motivation	Possess knowledge of socio-humanitarian and economic disciplines, willingness to demonstrate a well-formed worldview, civic and moral position of a highly educated person with a broad outlook and a culture of thinking. Demonstrate knowledge of natural science disciplines. The ability to explain, formulate and use basic indicators for solving tasks, communication with other sciences and its practical significance	Modeling of engineering systems
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Fundamentals of robotics	OR 4230	BS	Elective subjects	5.0	Bachelor	Computer science	4	2	Digitalization in engineering	Internship	Formation of students knowledge and skills in designing and programming robots. To program the robot's movement, to connect and program the robot's response to sensors, the purpose of structural and electronic parts of robotic designers, features of standard models of robots, the purpose of sensors.	To study the basic concepts of the laws of engineering mechanics, mechanics of materials, robotics and safety measures. To organize the production process, operation of MTP and maintenance of modern agricultural machinery with the introduction of innovative technologies and with the creation of business entities	Bases of production technology and transport technique repair
B095 - «Transportation Services»	6B11302 - «Traffic management and safety»	Full-time (bachelor 4 years) trimester	Bases of production technology and transport technique repair		BS	Elective subjects	5.0	Bachelor	Technical service	4	2			Regularities of formation of productivity and carrying capacity of means of service; organization of maintenance, rational technology of maintenance and complex indicators of maintenance and repair of transport equipment; to form students' scientific, reasonable approach to the organization and technology of work on maintenance and repair of transport equipment	Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology	Fundamentals of robotics

Head of the Department "Transport Equipment and Technologies"



Balgabekov T.K.